

**The Role of Social Congruence on Class Engagement: a Qualitative Study from  
Students' Perspective on the Student-Mentor Relationship**

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PSB3E-BT15: Bachelor's Thesis

Course code: PSB3E-BT15

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July 10, 2022

### **Abstract**

The first year of university can be very challenging and stressful for new students. Peer mentors might provide assistance for the transition to university as they are believed to be more socially congruent compared to traditional mentors. This study aims to investigate the way in which students perceive peer and faculty mentors as socially congruent and to analyze the influence of this perception on their affective and behavioral engagement. The study utilized semi-structured interviews of twelve first-year students from a problem-based learning course taught by both peer and faculty mentors. The interviews were later coded and analyzed using “Atlas.ti 23”. Compared to faculty mentors, peer mentors showed higher levels of social congruence due to similar ages, understanding of students' challenges, and shared lifestyles. As a result, students perceived a qualitative difference in mentors, interest, empathy, emotional support, and relatedness, which influenced their engagement. The study concludes that while faculty mentors provide the needed authority and guidance that is crucial for students to succeed academically, peer mentors have the complementary role of providing the right assistance and support during the transitional period.

*Keywords:* Social congruence, affective engagement, behavioral engagement, peer mentor, faculty mentor

## **The Role of Social Congruence on Class Engagement: a Qualitative Study from Students' Perspective on the Student-Mentor Relationship**

Adapting to a new learning and social environment can be far from easy, which is why many students encounter significant challenges when transitioning to the first year of university (Srivastava, 2009). During this period of study, some students suffer from stress and anxiety as they feel that the educational system is not providing them with the appropriate support to go through the challenges they encounter (Andrews et al., 2011); Singleton, 2016). For this reason, university administrations have been trying to implement different strategies to improve their student's educational experience and promote their academic success (Andrews et al., 2011). One such solution was found in peer mentoring, an effective intervention that enables new students to experience university life through the guidance and support of relatable peers (Lockspeiser et al., 2008; Singleton, 2016).

According to Terrion and Leonard (2007), the key mechanism through which peer mentors exert their positive influence on students is their greater *social congruence* compared to faculty mentors. Social congruence is a concept defined as the informal mentor-student bond based on the empathy and interest of mentors toward their students (Schmidt & Moust, 1995). Utilizing qualitative research methods, this study aims to investigate the impact of peer mentoring and the role of social congruence by gaining a deeper understanding of student's attitudes and perceptions.

Whereas traditional mentoring is a method built upon a hierarchical relationship, peer mentors share similar social roles, ages, and power dynamics with their mentees which prompts a more relatable and informal connection (Kram & Isabella, 1985). This should allow peer mentors to show more interest in their students' personal lives and be better at understanding their struggles and academic challenges based on similar previous experiences (Cate & Durning, 2007; Schmidt & Moust, 1995).

As social incongruence with faculty mentors is most pronounced in the first year, due to the age and experience gap, it is arguably preferable to implement peer mentoring at this stage of the students' education (Altonji et al., 2019). Furthermore, through the numerous challenges, novice students can largely profit from having relatable role models that can pass on to them the *hidden curriculum* of the study program, that is the set of unwritten rules that must be followed in order to succeed with fewer struggles (Altonji et al., 2019; Cate & Durning, 2007; Schmidt & Moust, 1995). The greater social congruence of peer mentoring enhances the students' comfort level when asking for help and support, suggesting the important role of this mentoring approach in easing transitional stress and increasing classroom engagement (Terrion & Leonard, 2007).

Previous studies have investigated the effects of peer mentoring compared to the more traditional faculty approach and most of them, like those argued until now, suggest the positive effects of peer-assisted learning. On the other hand, a smaller body of research was only able to display partial differences between the two mentoring approaches (Fard et al., 2020). Lockspeiser and colleagues (2008) for instance, report in their review that over 10 studies only half of them indicated differences in the performance of students who received assistance from more experienced peers compared to those who were followed by faculty mentors. This gives rise to the question of whether the two different types of mentoring influence students' learning in different ways and leaves space to develop further research that clarifies the effects of peer and faculty mentoring.

### **Class Engagement**

The aim of our study is to provide a deeper understanding of how and why social congruence promotes behavioral and affective engagement among students. Fredericks and colleagues (2004) define behavioral engagement as students' behaviors of positive conduct within the academic environment, such as adhering to the classroom's rules and norms,

contributing to class discussions with participation, and being involved in learning activities with effort, persistence, concentration, attention, and curiosity. Emotional or affective engagement, on the other hand, is identified as the students' perception of belongingness and identification with the academic environment, as well as students' relationships within the class (Fredericks et al., 2004).

Engagement is hypothesized to be promoted through the motivating and encouraging learning environment given by social congruence (Ben-Eliyahu et al., 2018). According to Rayan and Ryan (2019), autonomy support teaching, the approach that prioritizes the development of students' autonomy, can offer a valuable framework to better understand the mechanisms through which social congruence might promote engagement. When mentors display behaviors aligned with this approach, such as providing constructive feedback and listening to students' perspectives, they allow students to behave more freely and authentically, which encourages their motivation to actively engage in class (Deci & Ryan, 2002; Ryan & Ryan, 2019).

By investigating the role of social congruence and how it promotes affective and behavioral engagement, our study aims at understanding the nature of the differences between peer mentoring and faculty mentoring during the first year of university. Because peer mentors are closer in age and share similar experiences with the students, we want to investigate if and how they will contribute higher levels of social congruence to the students' engagement.

### **Justification of Qualitative Research**

In line with previous research, the present study investigates the topic through qualitative methods, to have a deeper understanding of how students perceive the interactions with their mentors (Almalki, 2016). The justification for the use of qualitative research lies in the limitations of quantitative research in this context. The latter approach can detect the

presence of the analyzed social congruence components but cannot reveal how these components are experienced and manifested. Furthermore, qualitative research can provide a deeper understanding of complex concepts such as the individuality and differences between participants (DiCicco-Bloom & Crabtree, 2006).

The qualitative method implemented in our study involves the use of interviews. This approach allows us to grasp the many facets of the mentor-student relationship and analyze social congruence and engagement through the perception of interest, empathy, emotional support, and similarities experienced by the students in class.

## **Method**

### **Design**

This study employed a qualitative phenomenological approach to investigate student perceptions of their mentors. Specifically, the aim is to compare student and faculty mentors in terms of social and cognitive congruence and examine how these factors influence student engagement during class. The phenomenological approach, as outlined by Husserl (1859), focuses on understanding and exploring the lived experiences of individuals. It can provide greater opportunity to uncover psychological processes that can influence engagement (Ring 2017), which might be missed when using a quantitative approach. Additionally, the current method has previously been used in the educational setting to shed light on problems and experiences of the students (Ring 2017).

### **Method**

Through the utilization of semi-structured interviews, there is an opportunity to conduct an in-depth exploration of the students' experiences, a task that would prove challenging when employing a questionnaire that restricts participants to predetermined response options considering the limitations associated with questionnaires (Razavi, 2001).

Given the capacity of the phenomenological approach to accommodate open-ended questions (Ring, 2017), we opted for a comparable semi-structured format. The questions were divided into two sections, with one section focusing on social congruence and the other on cognitive congruence. Within each section, the latter half concomitantly asked about cognitive, affective, and behavioral engagements. When warranted, follow-up questions were asked. Thus, there was ample opportunity to elaborate and ask follow-up questions, to ensure that we captured the unique, subjective experiences of the students.

### **Participants**

The study employed a purposive sampling approach. Contact with potential participants was established through a combination of in-person and online methods as part of the meticulous sampling process. Once participants provided their informed consent, interviews were scheduled at mutually agreed-upon dates and locations. To ensure consistency and adherence to specific criteria, we specifically targeted first-year psychology students at the University of Groningen who possessed proficient English language skills and were actively enrolled in the "Academic Skills" course. This particular course provides valuable academic support to students through the provision of both a faculty mentor and a peer mentor. A total of 12 participants were gathered as this has been found to reach data saturation (Guest, Bunce, and Johnson, 2006). This indicates that the sample size was sufficient to capture a comprehensive range of perspectives and insights relevant to the research objectives.

### **Data collection**

This research study was approved by the ethics committee of the University of Groningen in April 2023. To ensure the anonymity of all parties involved the participants were asked not to mention anyone by name during the interview. During the transcribing

phase, all names were removed from the text altogether. Second, participants were told that the interview was confidential. Additionally, participants were asked to sign an informed consent form where it was briefly explained to them what the study is about and that the interview would be recorded. Lastly, participants were told they could retract their data from the study within 10 days and that they were entitled to their right to withdraw.

Regarding the research timeline, the initial phase encompassed the formulation of interview questions. Prior to commencing actual data collection, practice interviews were conducted as a preparatory measure. To enhance the validity of the questions, several measures were implemented. The first version of the interview script underwent scrutiny by our supervisor and an external expert well-versed in qualitative research. Subsequently, a pilot study was conducted, involving three practice interviews. In addition to the two designated interviewers, an additional researcher was present to carefully monitor the participants' comprehension of the questions and evaluate whether the questions effectively elicited the desired information. As the researcher's interviewing skills improved and confidence grew, the interview format transitioned from group sessions with three interviewers to sessions conducted by two interviewers. However, it should be noted that one interview was conducted by a single interviewer. These meticulous steps were taken to ensure the integrity and reliability of the interview process, and to continuously refine and enhance the methodology throughout the study. We chose to revise the script after the practice interviews and after the first real interviews due to a lack of response or confusion from the participant. This is a common event in qualitative research as it is a reflexive process (DeCarlo, 2019). The main changes during these revisions consisted of cutting out questions that did not give new information, finding clearer formulations for questions that were confusing to the participants, and adding follow-up questions in places where we did not get sufficient depth of information with our original questions. Thus, the quality of the script was



continually improved to ensure that the acquired information fit the constructs the study was designed to measure and had enough depth to answer the research questions.

### **Procedure**

Before the interviews the participants were informed about the confidentiality of the data and each interview started with small talk and a few easy questions. The questions were based on previous literature (Schmidt & Moust, 1995; Loda et al., 2020). More specifically, we adopted similar themes in order to better understand the student experience of congruence. The duration of the interviews ranged from 35 to 80 minutes. All the interviews were conducted in the Faculty of Behavioral and Social Sciences. For most interviews a private room could be arranged, but some interviews were conducted in public areas; in those cases, it was ensured no one could overhear the interview. Most of the participants were provided with snacks and/or something to drink in order to make them feel comfortable and relaxed enough to engage in conversation. Furthermore, all the interviews were audio recorded on a device, as well as a second recording to prevent loss of data. Recordings were transcribed and all the participants were given a number from one to twelve to sort the transcripts. Names were only used to keep track of which transcripts were done and kept between members of the research team. Lastly, the names of the mentors of the students were not mentioned in the interviews and otherwise excluded in the transcript.

### **Data analysis**

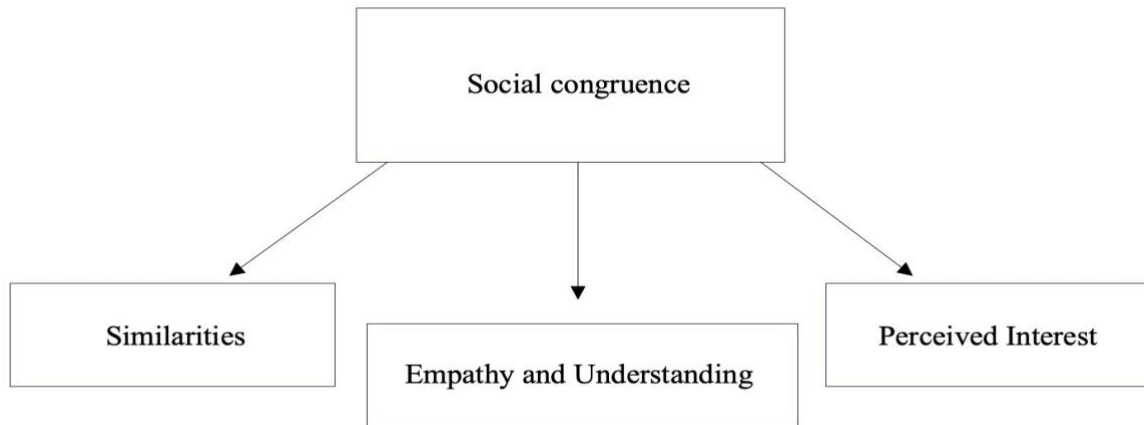
After the successful collection and transcription of data, a systematic process was initiated to analyze the data. Predetermined categories, informed by the literature, allowed for a predominantly deductive analytical approach (Brinkmann, 2023; Döringer, 2021). Any instances of inductive analysis followed thereafter, to capture emergent insights or themes not initially considered. Using ATLAS.ti software (version 23.0.6), the transcripts were

meticulously coded according to these categories, ensuring the representation of every piece of information was accurate (G. Tort-Nassarre et al., 2023). Upon conducting a comprehensive deductive analysis, a layer of inductive analysis was carried out (Döringer, 2021; Bingham and Witkowsky, 2022). This facilitated the identification of new themes or patterns that emerged from the data, potentially offering novel insights (G. Tort-Nassarre et al., 2023). To support the results, quotes that accurately reflected the categories and unique findings were carefully selected and extracted from the transcripts (Loda et al., 2020; G. Tort-Nassarre et al., 2023).

## Results

Overall, N=12 first year psychology students from the University of Groningen were interviewed. This number of participants was chosen because no new data emerged past that point and thus saturation was reached. The goal was to yield a sample size that is both convenient and sufficiently large to capture the phenomenon which is being studied (Guest et al., 2006). The findings show aspects of social congruence such as similarities, safety and interest perceived by the students in their relationship with the mentors as well as the differences between the peer and faculty mentors. The results on affective and behavioral engagement are shown. In the analysis, the interviews were coded with ATLAS.ti software (version 23.0.6), the following codes were used for social congruence: similarity, empathy and emotional support, as well as interest. The codes for engagement were affective engagement, behavioral engagement. All codes were split into a positive and a negative subcode to indicate how the category was perceived by the student.

**Figure 1** *Categories for Social Congruence*

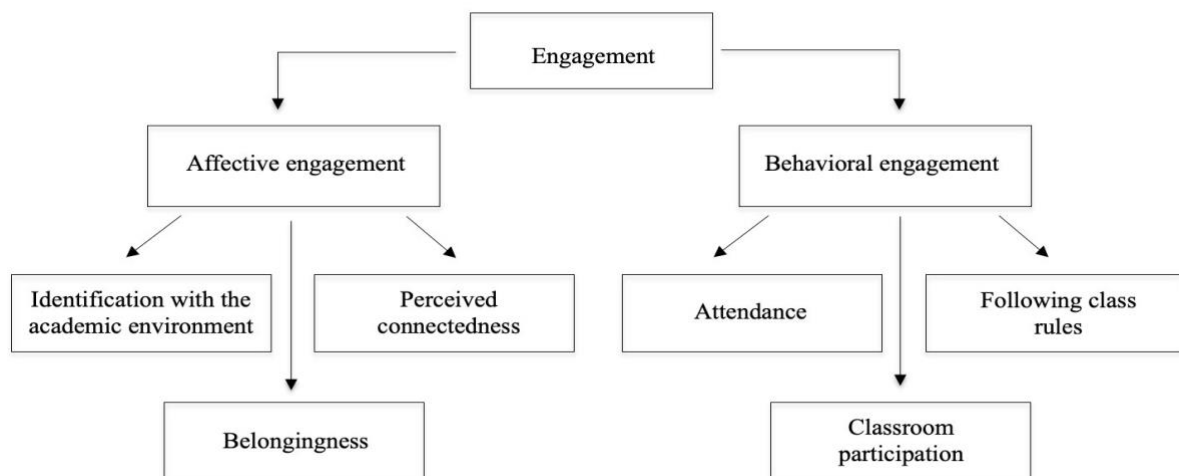


The categories of similarities, empathy and emotional support and interest were used in the deductive analysis as they are key factors of social congruence (Schmidt & Moust 1995, Loda et al., 2020).

Based on previous research the categories for engagement are identification with the academic environment, belongingness, perceived connectedness with teachers and peers (Fredericks, 2004, Reschly, 2020). Additionally, the categories for behavioral engagement are attendance, classroom participation and following rules.

## Figure 2

### *Categories for engagement*



Finally, a brief inductive analysis of newly emerging phenomena was done which describes the different ways in which students perceive obligation to the mentors, as the themes emerged during the data analysis and were not predicted beforehand. This could yield new aspects in the studied relationship which might provide inspiration for new theories (Gilgun 2015).

### **Social Congruence**

Following the data analysis, the following patterns were identified: perceived interest shown by the mentors, empathy and understanding shown by the mentors, perceived similarities with the mentors.

#### ***Perceived Interest Shown by the Mentors***

The interest of the faculty mentor was directed rather at academic performance than towards the well-being of the students. This is supported by the following quotes.

Quote 1:

“They [the faculty mentor] ask you personal questions as to whatever relates to academic performance” (1:122 ¶ 934 in Participant 2)

Students reported that the peer mentor showed better interest in their well-being compared to the faculty mentor. Furthermore, the interest of the peer mentor in academic performance was not necessarily as present and connected to the general well-being.

Quote 2:

“I guess with the student mentor we actually talked more about like he would ask how did your guys' exam go exams go? Like, who passed this and this? Like how you doing you know and then we would talk about that.” (1:32 ¶ 289 in Participant 6)

Quote 3:

“Especially like the trying to encourage the the mix of outside of just the fewer academic things that we did with our student mentor like we went out for for

coffee in the beginning and then we went like bowling again, sometime in winter. And also like the Ice Breakers where it's not really academic when you talk to people. In a more broad way that, like encourages connections outside of the group” (1:24 ¶ 302 in Participant 9)

### **Affective Engagement**

Students indicated feeling cared for when perceiving interest from their mentors in their personal life.

Quote 4:

[Interviewer:] “How did your mentors interest in your personal life make you feel?

[Participant:] “It was nice. It felt a little bit like awkward at first (...) but at the same time, I'm happy that they did that because I know that they really cared so (...)” (1:77 ¶ 273 – 275 in Transcript\_Participant3)

Quote 5:

“But (...) when you have some mentors who actually show interest and so that they care, you feel more comfortable asking for help.” (1:128 ¶ 1135 in Interview 2 Maria A.O. Transcript)

### **Behavioral Engagement**

The participants indicated that the interest shown by the mentors prompted them to engage in classroom conversations.

Quote 6:

“Because she was interested in all of our personal answers, also to things like procrastination or study schedule, study methods or something I think all of us were a bit more inclined to answer those questions and to share something personal” (1:87 ¶ 328 in Participant 8)

### ***Empathy and Emotional Support Shown by the Mentors***

The participants' comments indicate that the faculty mentor is more focused on academic performance and less empathetic than the peer mentor.

Quote 7:

“We have like a student in the class that's really shy and doesn't talk very loud, and he doesn't really have that understanding. So, he's just like, can you speak up and, this feeling was just like I don't uhhhh... like just trying to talk and it's like the empathy and those kinds are, kind of a little less from the faculty mentor.” (1:9 ¶ 210 in Participant 9)

Furthermore, students indicated perceiving empathy from their peer mentor who showed understanding for personal situations.

Quote 8:

“I actually failed social psychology (...) I shared that with her, and she told me that like she empathized with me a lot because she also thought that it was one of the hardest courses in the first year... I felt really good about that.” (1:56 ¶ 208 – 216 in Interview 2 maria A.O. Transcript)

Quote 9:

“You're allowed to have. Like faults and with like the emotional care like because you already said, 'Hey, I struggle... with motivation' and it was already like the student mentor already gave you like the feedback of 'That's OK like everybody has that, I had that too.' You would also be encouraged to make more mistakes in class.” (4:41 ¶ 386 in Participant 8)

### **Affective Engagement**

Students indicated feeling distant to the faculty mentor based on the lack of understanding which the mentor showed.

Quote 10:

“Faculty mentor, I would say it was more so like the lack of concern is what separated him from us (...) I don't think he really cared that much” (47 ¶ 403 in Participant 11)

Additionally, participants found the faculty mentor less approachable and more intimidating than the peer mentor and experienced the class as unpleasant.

Quote 11:

“But with a faculty mentor, it's more like, I have a class I have to go to that.

Especially after like times (...) like where there has been a more tension where yeah, hesitant or you like look at the clock, when is this finally over? as I'm like, you still behave properly, like the way you should behave.” (1:152 ¶ 193 in Participant 9)

On the other side the empathy of the peer mentor showed to create a pleasant environment for the students.

Quote 12:

“Student mentor I'd say just how he approached in general, or how open he was also to our conflicts. That was very empathetic and just in general, the way he's he spoke to us was really nice. So it was they had it again like this nice atmosphere in class.

Felt just also very empathetic” (1:8 ¶ 265 in Participant 6.docx)

### **Behavioral Engagement**

Students indicated being hesitant to participate as they did not feel connected to the faculty mentors.

Quote 13:

“With the faculty mentor again, there wasn't a great personal connection, but I also noticed whenever of course there was a question and then no one would say anything

I'd be like, OK, you know what? I have to raise my hand. I have to answer because we want to move on from this topic" (1:36 ¶ 354 in Participant 6)

However, the empathy of the peer mentor was reported to make the students feel seen and inclined to participate in class.

Quote 14:

"If you feel seen (referring to peer mentor), you also want to do better for the class. (...) if you have this personal connection then(...) are kind of being watched not, not necessarily in a negative way, (...) especially like the student mentor notices differences in like participation (...) So it makes it, it feel (...) makes you feel more seen and makes you want to participate more just because you were being watched." (1:116 ¶ 309 in Participant 9)

### ***Perceived Similarities with the Mentors***

The perceived similarities with the faculty mentor were indicated to be rather little.

Quote 15:

"There's some things he just doesn't understand that students are starting with because he's just not starting with it. So I feel like it's hard for him to understand so. He also kind of doesn't." (1:9 ¶ 210 in Participant 9)

Furthermore, the commonalities with the faculty mentor were indicated to be weak and related to nationality, culture or academic interests.

Quote 16:

"I don't really know, I guess that we're both studying psychology. But apart from that, I don't really think we have a lot in common." (1:47 ¶ 161 in Participant 1)

Quote 17:



“I mean, my faculty mentor, obviously, we both come from the same country I... it was very nice to relate with her, like with the cultural differences.” (1:31 ¶ 1061 – 1069 in Participant 2)

The similarities between the peer mentor and the students were related to the previous student experience, struggles and the lifestyle or the proximity in age.

Quote 18:

“The student mentor we are both students, (...) I think so she went also through stuff that I am going through and learned similar things.” (1:67 ¶ 238 in Participant 3)

### **Affective engagement**

Resulting from the similarities, students indicated feeling understood and perceiving relatedness to their mentors. Based on the differences in similarities students reported perceiving better relatedness with the peer mentor.

Quote 19:

“The student mentor was just because we also knew that he was studying at the same time that it was just more close and we knew that one year ago he was in the same position and that's why it was just more friendly than the faculty mentor” (1:33 ¶ 44 in Participant 4)

Quote 20:

“He (peer mentor) was talking about his student life. I could relate in some parts of (...) Well, by himself, maybe so in some parts of student of his student life, when you talk about experiences, I could relate to him or experiences he had last year about, like with the workload and stuff at the beginning” (3:80 ¶ 255 in Participant 7)

### **Behavioral Engagement**

The peer mentors' relatedness to the students was indicated to result in the students disclosing personal struggles.

Quote 21:

“The student mentor was really nice. (...) Like those were the nicest classes cause they could really like relate to us and we could really talk about all the difficulties (1:2 ¶ 10 in Participant 6.docx)

***Inductive analysis***

Students indicated perceiving obligations in the relationship with the faculty mentor as related to the authority and respect for the faculty mentor and the course. The obligation towards the faculty mentor was rather related to the authority and respect for the faculty mentor and the course.

Quote 22:

“And then the faculty mentor, I think it was more that relationship of like he was superior made me feel like I have to follow rules because this is a class and he's like in charge and if he says something I have to do it. That was, yeah, it was like, I followed the rules for both of them, but it was for different reasons.” (1:50 ¶ 415 in Participant 11)

Quote 23:

“The faculty mentor was more like, OK, respect as in, I admire this person and they're in a higher position and they're here to teach me.” (1:51 ¶ 1419 in Participant 2)

Furthermore, students reported feeling obligated to follow the class with the peer mentor out of sympathy and appreciation as well as friendly respect.

Quote 24:

“I think it was mostly like with the student mentor (...), he was more like friendly respects, like in a friendly manner.” (1:50 ¶ 1415 – 1417 in Participant 2)

Quote 25:

“The relationship with student mentor was just one of respect, so obviously I like I had so much respect for him. I would never want to not follow the class. (...) because, like you would never do that to someone if you just, like, get on with them like you're not going to be rude.” (1:50 ¶ 415 in Participant 11)

## **Discussion**

The aim of this study was to compare the in-class experience of students with both peer and faculty mentors. Specifically, the study utilized semi-structured interviews to explore how students' affective and behavioral engagement is differently influenced by the socially congruent teaching style of peer and faculty mentors. These findings suggest that there are qualitative differences in the way peer mentors and faculty mentors are socially congruent with their students, due to display of interest, empathy and emotional support, and similarities.

## **Main Findings**

While faculty mentors showed interest in the academic performance of the students, peer mentors displayed a socially congruent teaching approach, showing more interest in the well-being of the students outside of the academic context. The Findings also showed that the interest from the two mentoring approaches influenced but types of engagement: affective engagement, as the students felt cared for, and behavioral engagement, as it prompted students to engage more in classroom conversation.

Mentors differed in the way they showed empathy toward the students. Faculty mentors' display of empathy was not perceived significantly by students, who instead noticed a greater focus on contribution and success. This lack of empathy negatively influenced affective engagement as students reported feeling tension and distance towards them. On the other hand, students perceived peer mentors as understanding and sensitive to personal issues,

which made them feel more comfortable in class. The lack of empathy also negatively influenced behavior engagement. Students reported feeling hesitant to participate in a class with a faculty mentor but willing to participate in the presence of peer mentors, as they perceived to be personally acknowledged. Students shared a higher social congruence with peer mentors compared to faculty mentors due to the perceived similarities related to age, lifestyle, and the ability to relate to struggles. Similarities were shown to influence affective engagement as they made students feel understood and related to their mentor. In regard to behavioral engagement, students reported that peer mentors' relatedness encouraged the disclosure of personal struggles.

### **Previous Research**

Our results support previous research, suggesting that peer mentors are able to show more interest in the students' personal life with the presented differences in the interest shown by the mentors (Cate & Durning, 2007; Schmidt & Moust, 1995).

In line with the findings by Loda and colleagues (2019), the present study found that peer mentors can be considered more socially congruent within the domains of empathy and emotional support. Supporting previous research, relatedness with students was found to be greater with peer mentors, as they were perceived as more understanding (Lockspeiser et al., 2017). Moreover, the findings extend the literature by showing the ways in which the similarities were perceived, as they were not only due to a recent experience with the material but also through similar age and a similar lifestyle as well as sharing personal information. In contrast, we found that the faculty mentor shared similarities such as the same nationality or being interested in the same field of interest as the student.

Resulting from the perceived interest, empathy and emotional support, and relatedness, students perceived a change in affective engagement and behavioral engagement.

This supports the claims by Schmidt and Moust (1995) that social congruence influenced the way the students felt in the class. The specific relationship between social congruence and affective and behavioral engagement is a rather novel topic. However, related relationships have been studied by Rotgans and Schmidt (2011). Their findings provided insights into how social congruence and *subject matter expertise* influence *cognitive congruence*, which then promotes higher situational interest in students (Rotgans & Schmidt, 2011). The present study supports a connection between social congruence and engagement and thereby provides similar findings.

### **Extension of Previous Research**

Our findings are consistent with previous research suggesting that peer mentoring is beneficial for students due to the social congruence displayed by peer mentors (Schmidt & Moust, 1995). However, the results not only support previous findings but also show in what ways the peer mentor was socially congruent compared to the faculty mentor as peer mentors are able to relate to students through shared experiences, age, and lifestyle. The present study also shows that aspects of social congruence in the peer mentor, such as empathy, led to the students feeling more comfortable and connected to their peer mentor compared to their faculty mentor. This ties in with the findings of Loda and colleagues (2019) and provides further information on how students experience the social congruence of their mentors. Thus, the study extends the literature with new information on how students perceive the differences in peer and faculty mentors' relatedness and empathy within their socially congruent teaching style. Previous literature on how mentors are socially congruent by showing interest in the student was not significantly extended by the present study.

The findings of the present study extend the previous literature, such as the findings on situational interest by Rotgan and Schmidt (2011) as it shows how social congruence influences affective and behavioral engagement. Assessing how the students felt and behaved

in the classroom, based on the social congruence displayed by the mentors, showed that students participated in class more comfortably when with the peer mentor. The results also showed that students' behavioral engagement was influenced by fear of participating and making mistakes in class with the faculty mentor. Additionally, effects on affective engagement add that students perceive feelings of comfort and connectedness to the class with the peer mentor and a feeling of pressure for professionalism and performance with the faculty mentor.

### **The Role of Self-Determination Theory**

The findings of this paper can be explained by the concept of *autonomy support*, a concept that is part of the *self-determination theory* (SDT). SDT is a theory of human motivation and personality that describes people's inherent growth tendencies and innate psychological needs. It suggests that people have three basic psychological needs: autonomy, relatedness, and competence (Ryan & Deci, 2018). Autonomy-supportive teaching is based on the concept of autonomy support, which refers to the extent to which an individual can make choices and take actions that are in line with their own interests and values. The teaching method is characterized by six behaviors: taking the students' perspective, vitalizing inner motivational resources, providing explanatory rationales, acknowledging and accepting negative affect, relying on informational and non-pressuring language, and displaying patience (Reeve, 2016). Autonomy support has been linked with positive outcomes such as increased motivation, performance, well-being, and engagement (Guay, 2022; Liu et al., 2020). An increase in teachers' autonomy support enables students to make their own choices and gives them the opportunity to control their own learning, which has been shown to boost engagement and motivation in the classroom (Reeve et al., 2004; Reeve, 2016).

The participants in the present study reported that the peer mentors displayed the mentioned aspects of autonomy support towards them which promoted engagement. In their

way of communication, the mentors showed understanding of their perspective as well as accepting and patient non-pressuring language. This made the students feel like the peer mentor was “one of them”, which is in accordance with the theory (Liu et al., 2020). Giving the students autonomy and conveying an understanding of autonomy support, led the students to increased affective and behavioral engagement in class with the peer mentor. The understanding and non-pressuring communication that the students perceived from the peer mentor made them feel comfortable and connected in class and prompted them to participate more as they felt free to do so. With the faculty mentor, in contrast, the autonomy support was worse as students experienced pressure from the mentor and perceived a rather poor understanding of their perspective. In accordance with the previously mentioned effects of autonomy support, this led to worse affective and behavioral engagement. The students perceived pressure to work and contribute to class from the mentor to perform as well as a lack of patience based on the faculty mentor's instructions. Thus, they felt uncomfortable and rather unwilling to participate in the class as they were afraid to make mistakes.

Finally, the understanding of perspective and support shown by the peer mentor is likely to promote the students' feeling of connectedness and relatedness in the classroom which promotes engagement. The demanding and pressuring interactions with the faculty mentor strip the student's freedom for decisions and learning away.

Overall, it can be concluded that the results are in line with the established relationship between autonomy support and engagement as not only social congruence can explain changes in the student's engagement but also the freedom that they were given by the mentors in their decisions and learning (Reeve et al., 2016).

As previously mentioned, autonomy is important for students, however, too much autonomy can have negative effects (McCombs, 2015). Students who are given excessive

autonomy can become overwhelmed and struggle to manage their time effectively. Additionally, students may not receive the guidance and support they need for academic success, which can lead to feelings of isolation and frustration that negatively impact their academic performance (McCombs, 2015). Considering the current study, one may argue that the faculty mentor, even though he/she might risk making the student feel pressured, pushes the students to be productive and guide them through the learning experience in the first year.

The faculty mentor can provide more specific instructions and guidance that may help the student succeed academically compared to the peer mentor who has considerably less experience and thus cannot provide as much expertise and authority (Noonan et al., 2007). Therefore, the faculty mentor's expertise and determined teaching style may be a beneficial addition for the peer mentor, as the faculty mentor can provide a determined and guiding approach that can balance out the comfortable informal feeling that the peer mentor creates, and which might lack determination.

This ties in with the inductive findings of this study that students felt an obligation towards the authority of the faculty mentor and the course and the obligation to with the peer mentor was rather to respect their person. This can be caused by the different responsibilities that the tutors have as the faculty mentor is responsible for controlling and guiding the students and the peer mentor seeks to give the student freedom by understanding and comforting them (Noonan et al., 2007).

### **Implications**

Based on the findings, one should incorporate elements of social congruence, such as empathy and relatedness with students, into mentoring programs to promote students' engagement. The students' need for autonomy should be satisfied by conveying understanding and a sense of allyship from the mentors towards the students, which could include specific behaviors or skills such as emphasizing with students' situation, sharing



personal experiences, and sensitivity to the students' personal struggles (Altonji et al., 2019; Reeve, 2016). This would be especially beneficial for the relationship between the faculty mentos and students as it lacks the mentioned factors. The peer mentors on the other side, would benefit from the faculty mentors' authority and ability to provide better guidance and expertise (Noonan et al., 2007).

### **Limitations**

Like many other qualitative studies, the generalizability of our results may be limited due to the small sample size and the fact that the sample was not randomized (Tipton et al., 2017). Therefore, implications based on the findings from this study should be drawn with sensitivity. Additionally, there is the potential for bias during interviewing and the data analysis as the experiences and skills of the interviewers were rather little (Galdas, 2017).

Future research could further investigate the mentioned relationship to support the findings of this study. When replicating this study, one should consider using a randomized sample with a greater balance regarding gender. Also, the interviews should be conducted with researchers who are better trained in interviewing. Additionally, an experimental study could be created. Researchers would randomly assign the students to either a high or low social congruence condition to try and assess a cause-and-effect relationship between social congruence and engagement (Shadish, 2002). In the high social congruence condition, students could be placed in groups with mentors who share similar interests and backgrounds. In the low social congruence condition, students could be placed in groups with a mentor who does not share similar interests and backgrounds. The researchers could then measure student engagement by recording attendance, participation in class discussions, and a questionnaire about the feelings experienced during the class. Thus, the influence of social congruence on students' engagement could be measured by an experimental study.

Finally, another study could measure or control for the students perceived autonomy support coming from the mentors and analyze its effect on the relationship between social congruence and engagement.

### **Summary and Conclusion**

In summary, this study provides valuable insights into the differences between peer and faculty mentoring and its effects on student engagement in the classroom. Our findings extend previous literature providing qualitative insights into the ways in which students perceive mentors' social congruence. The relationship between peer mentors and students showed that interest, empathy and emotional support, and relatedness displayed by the peer mentor were important factors in promoting student engagement. Students reported feeling more cared for and understood by their peer mentor compared to their faculty mentor. This led to a deep connection between students and their peer mentors as they perceived them as "one of the students" and led them to participate more freely in class. In contrast, we found that there was rather poor empathy and emotional support, and relatedness shown by the faculty mentor toward students. The participants reported perceiving a lack of empathy and emotional support from their faculty mentor which made them feel distant from their mentor and uncomfortable in the classroom environment. The lack of relatedness was caused by factors such as age gaps, differences in lifestyle, and difficulties relating to problems or concerns. However, it is important to note that the faculty mentor provides determined guidance, authority, and expertise which complements the peer mentor who lacks these aspects.

Both the role of the faculty and the peer mentor seem to have their strengths and weaknesses which balance each other out. The peer mentor can provide autonomy and comfort, prompting the students to feel good about the class and willing to participate; the faculty mentor, on the other hand, who lacks these attributes, can provide the expertise and

authority which guides the students to success, thereby filling the gaps of the competences of the peer mentor.

By incorporating these elements of social congruence into mentoring programs, universities can promote student engagement and success during the challenging transition to university life as students will be both comforted and understood as well as guided by their mentors.

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## Appendix

### Interview Questions

#### ***Introduction:***

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?
- Confidentiality
- Sign the informed consent
- 10 days to email that they want the recording deleted
- Ask them if it's okay to record the interview
- They can stop at any time
- Interview is about an hour

#### ***Broad starter question***

- What did you think about the course?
- How did you like your class?

#### **Questions concerning cognitive congruence**

*Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)*

- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?
- What did you prefer about the way your mentors communicated during the explanations, and why? What did you not like as much? Whom did you prefer?
- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?

- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?
- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why?

\* Short intro what we talked about and what it does to engagement\*

- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

### ***Engagement questions***

#### **cognitive engagement**

- How did your mentors' explanations of difficult topics influence your motivation to learn?
- How did your mentors' skill of explaining topics influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

#### **affective engagement**

- How did your mentors' way of explaining difficult topics make you feel during class?
- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?
- To what extent, do you believe that your mentors' understanding of your academic struggles influence your emotions, feelings, and attitudes towards the class?

#### **behavioural engagement**

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?

- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

***Questions concerning social congruence:***

Social congruence refers to a teacher's personal interest in or concern for his/her students

- How much do you believe your mentors showed care for their students?
- Can you provide an example of this?
- Were there any differences between the two and whom did you prefer? Why?
- How approachable were each of your mentors? How did they differ from each other? Why do you believe so? Whom did you prefer in this aspect and why?
- In what ways did your mentors display empathy and emotional support towards you? Were there any differences between their competence in these matters? Why?
- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?
- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor? Whom did you prefer and why?
- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement\*

- We have already talked about tutors' interest in your personal life etc.
- let's focus on the consequences that it might have had on you

**Engagement questions (updated 23.04)**

***cognitive engagement***

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn? How did having experiences in common influence your motivation?
- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

***affective engagement***

- During the lessons, how did your mentor's interest in your personal life make you feel?
  - a. How did that influence your attitudes towards the class?
- How did your teachers' concern for you influence your sense of connectedness to the class environment?

***behavioural engagement***

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?
- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)

**Questions for interview (Second version)*****Introduction:***

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?
- Confidentiality
- Sign the informed consent
- 10 days to email that they want the recording deleted
- Ask them if it's okay to record the interview
- They can stop at any time
- Interview is about an hour
- We will ask about your experiences with the course, Academic Skills, and your student and faculty mentors.

***Broad starter question***

- What did you think about the course?
- How did you like your class?

***Questions concerning cognitive congruence***

*Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)*

- What did you like about the way your mentors communicated? What did you not like as much? Whom did you prefer? Why?

- What did you think about the explanations of the mentors? How did they compare?  
Whom did you prefer? Why?
- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?
- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?
- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why?

\* Short intro what we talked about and what it does to engagement\*

- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

### *Engagement questions*

#### **cognitive engagement**

- How did your mentors' explanations of difficult topics influence your motivation to learn?
- Earlier we asked you how your mentors explained difficult topics. In that regard, how did this affect your confidence in your ability to understand the course material? What about your confidence in your ability to take on challenging tasks? Why do you believe so?

**affective engagement**

- How did your mentors' way of explaining difficult topics make you feel during class?
- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?
- Going back to obstacles that you faced throughout the course, how did your mentor's understanding of these struggles influence your emotions, feelings, and attitudes towards the class?

**behavioral engagement**

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?
- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

**Questions concerning social congruence:**

**Social congruence refers to a teacher's personal interest in or concern for his/her students**

- How much do you believe your mentors showed care for their students?
- Can you provide an example of this?



- Were there any differences between the two and whom did you prefer? Why?
- In what ways did your mentors display empathy and emotional support towards you? Were there any differences between their competence in these matters? Why?
- How approachable were each of your mentors? How did they differ from each other? Why do you believe so? Whom did you prefer in this aspect and why?
- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?
- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor? Whom did you prefer and why?
- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement\*

- We have already talked about tutors' interest in your personal life etc.
- let's focus on the consequences that it might have had on you

### **Engagement questions (updated 23.04)**

#### **cognitive engagement**

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn?
- Earlier, you talked about what you had in common with the mentors. How did having these experiences in common influence your motivation to learn?
- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

#### **affective engagement**

- During the lessons, how did your mentor's interest in your personal life make you feel?
- b. How did that influence your attitudes towards the class?
- How did your teachers' concern for you influence your sense of connectedness to the class environment?

#### **behavioral engagement**

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?
- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)

#### **Questions for interview (third version)**

**Introduction:**

- Get them comfortable with questions like: Did you find your way here well? What do you think of the psychology program so far? How do you like living in Groningen?
- Introduce everyone and explain what they will do (especially the one taking notes)
- Confidentiality
- Sign the informed consent
- 10 days to email that they want the recording deleted
- Ask them if it's okay to record the interview
- They can stop at any time
- Interview is about an hour
- We will ask about your experiences with the course, Academic Skills, and your student and faculty mentors.

**Broad starter question**

- What did you think about the course?
- How did you like your class?

**Questions concerning cognitive congruence**

*Cognitive congruence refers to the ability to express oneself in a language students can understand, using concepts they use and explaining concepts in ways easily grasped by students (Schmidt & Moust, 1995)*

- What did you like about the way your mentors communicated? What did you not like as much? Whom did you prefer? Why?
- What did you think about the explanations of the mentors? How did they compare? Whom did you prefer? Why?
- How understandable was the language that the tutor used? How did the mentors compare? What did you prefer and why? How did they use terminology?
- How did the mentors explain difficult topics? Were they able to break down difficult concepts into simpler ones? How did they compare? Whom did you prefer and why?
- To what extent were your mentors capable of understanding your academic problems? How did they differ from each other in this regard? Whom did you prefer and why? How did you find the individual meeting with your faculty mentor?

\* Short intro what we talked about and what it does to engagement\*

- we have talked about the language that your tutors used to explain the material
- let's focus on the consequences that it might have had on you

### ***Engagement questions***

#### **cognitive engagement**

- How did your mentors' explanations of topics influence your motivation to learn?  
How was your motivation different after a meeting with your student mentor or with your faculty mentor?
- Earlier we asked you how your mentors explained difficult topics. In that regard, how did this affect your confidence in your ability to understand the course material? What about your confidence in your ability to take on challenging tasks? Why do you believe so?

### **affective engagement**

- How did your mentors' way of explaining topics make you feel during class?
- How did your mentors' teaching style influence your sense of belonging and connectedness to the class environment?
- Going back to obstacles that you faced throughout the course, how did your mentor's understanding of these struggles influence your emotions, feelings, and attitudes towards the class?

### **behavioral engagement**

- How did your mentors' way of leading discussions influence the extent to which you participated in class? What made you participate?
- How does your mentors' way of presenting the material influence your desire to follow the class rules? (attendance, positive conduct, effort)

**Questions concerning social congruence:**

**Social congruence refers to a teacher's personal interest in or concern for his/her students**

- How much do you believe your mentors showed care for their students?
- Can you provide an example of this?
- Were there any differences between the two and whom did you prefer? Why?
- In what ways did your mentors display empathy and emotional support towards you?  
Were there any differences between their competence in these matters? Why?
- How approachable were each of your mentors? How did they differ from each other?  
Why do you believe so? Whom did you prefer in this aspect and why?
- How did your mentors show interest in their students? Yes, in terms of their personal lives and well-being? Were there any differences between the two?
- How did your mentors express praise and criticism? How much did they acknowledge the effort you had put into the work? How did this compare to the other mentor?  
Whom did you prefer and why?
- Overall, what do you and your mentors have in common? In what ways are they 'like you'? What makes you say this? Were there any differences between the two? Why do you think so? Whom did you prefer, regarding this?

Short intro what we talked about and what it does to engagement\*

- We have already talked about tutors' interest in your personal life etc.
- let's focus on the consequences that it might have had on you

### *Engagement questions (updated 23.04)*

#### **cognitive engagement**

- In what ways do you believe that your mentor's interest in your personal life impacts your motivation to learn?
- Earlier, you talked about what you had in common with the mentors. How did having these experiences in common influence your motivation to learn?
- How did the extent to which your mentors' encouraged collaboration influence your ability to understand the course material? What about your ability to take on challenging tasks? Why do you believe so?

#### **affective engagement**

- During the lessons, how did your mentor's interest in your personal life make you feel?
- c. How did that influence your attitudes towards the class?
- How did your teachers' concern for you influence your sense of connectedness to the class environment?

#### **behavioral engagement**

- What influence did the mentor's interest in the students personal lives, and emotional support, have on the extent to which you participated in class?
- How did your mentor's relationship with you affect your desire to follow the class rules? (attendance, positive conduct, effort)